

Remarks

The Office Action mailed December 16, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1, 2, 6-7, 9, 11-12, 16-17, 19, 21-22, 26-27, 29 and 31-45 are pending in this application. Claims 1-30 stand rejected. Claims 1, 2, 6-7, 9, 11-12, 16-17, 19, 21-22, 26-27, and 29 have been amended herein. Claims 3-5, 8, 10, 13-15, 18, 20, 23-25, 28, and 30 have been cancelled herein. Claims 31-45 have been newly added herein. No new matter has been added.

In accordance with 37 C.F.R. 1.136(a), a one month extension of time is submitted herewith to extend the due date of the response to the Office Action dated December 16, 2004, for the above-identified patent application from March 16, 2005, through and including April 18, 2005. In accordance with 37 C.F.R. 1.17(a)(1), authorization to charge a deposit account in the amount of \$120.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 1-10 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed.

The Office Action asserts at page 2 that Claims 1-10 “do not claim a technological basis in the pre-amble and the body of the claim” and “[w]ithout a claimed basis, the claim may be interpreted in an alternative as involving no more than a manipulation of an abstract idea and therefore non-statutory under 35 U.S.C. 101.” Applicants respectfully traverse this assertion. More specifically, Applicants submit that the claims of the present patent application are directed to practical applications in the technological arts. “Any sequence of operational steps can constitute a process within the meaning of the Patent Act so long as it is part of the technological arts.” *In re Musgrave*, 431 F.2d 882 (C.C.P.A. 1970). For example, independent Claim 1 is directed to a computer implemented method for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model. Applicants submit that grouping assets included within a portfolio for valuation purposes is a useful process that is considered to be within “the technological arts.”

One specific example of such a method implementation is a computer programmed to at least one of receive from a seller a proposal to sell a portfolio of assets wherein the assets are included within at least one segment defined by the seller, compute sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model, compute SSE values for the at least one defined portfolio segment using a simple model, compute an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment, rank the at least one defined portfolio segment based on the computed error ratio, and determine an amount to offer by a potential buyer for purchasing assets included within the at least one defined portfolio segment based on the ranking. While the claims are not limited to the specific examples related to a computer, the claims need not be so restricted to satisfy the requirement of Section 101.

In light of the “Examination Guidelines for Computer-Related Inventions,” Applicants further traverse the assertion included in the Office Action that Claims 1-10 are directed to non-statutory subject matter under Section 101. The Examination Guidelines for Computer-Related Inventions provides in relevant part as follows:

In order to determine whether the claim is limited to a practical application of an abstract idea, Office personnel must analyze the claim as a whole, in light of the specification, to understand what subject matter is being manipulated and how it is being manipulated. During this procedure, Office personnel must evaluate any statements of intended use or field of use, any data gathering step and any post-manipulation activity.... Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under § 101. Further, when such a rejection is made, Office personnel must expressly state how the language of the claims has been interpreted to support the rejection.

Applicants respectfully submit that Claims 1-10 are limited to a practical application in the technological arts. Furthermore, Applicants respectfully submit that the Office Action does not expressly state how the language of Claims 1-10 supports the Section 101 rejection.

Claim 1 is a method directed to “grouping assets included within a portfolio of assets for valuation purposes.” Thus, Applicants submit that Claim 1 is directed to a useful process that is

considered to be within “the technological arts.” Furthermore, Claim 1 recites a “computer implemented method for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model.” The method includes “receiving from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller...computing sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model and the computer, wherein the classification and regression tree based model generates at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included within the at least one cluster, each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster...computing SSE values for the at least one defined portfolio segment using a simple model and the computer, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment...computing an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment using the computer...ranking the at least one defined portfolio segment based on the computed error ratio...and using the ranking by a potential buyer to determine an amount to offer for purchasing assets included within the at least one defined portfolio segment.” Thus, Claim 1 uses a computer to perform certain steps of the process. Claim 1 is therefore directed to a practical application in the technological arts.

Claims 3-5, 8, and 10 have been canceled. Claims 2, 6, 7, and 9 depend from independent Claim 1. For the same reasons that Claim 1 satisfies Section 101, Claims 2, 6, 7, and 9 also satisfy Section 101.

For at least the reasons set forth above, Applicants respectfully request that the Section 101 rejection of Claims 1-10 be withdrawn.

The rejection of Claims 1-30 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,088,685 (Kiron) in view of U.S. Patent No. 6,792,399 (Phillips) is respectfully traversed.

Kiron describes a mutual fund securitization process permitting the trading of open end mutual funds and linked derivative securities on or off the floor of a National Securities Exchange. The targeted individual open end mutual fund or group of open end mutual funds, selected through a screening process is securitized through the creation of a new, separate security. This new security is preferably a "closed end fund of funds" and linked derivative securities, which synthetically replicate the statistical relationship of the defined individual or group of open end mutual funds. The maintenance of financial records for the new security is maintained by electronically storing dividend, capital gains and income received from the open end funds which have been invested in, and calculating pro-forma financial statements to disseminate to shareholders and all relevant parties.

Phillips describes combination forecasts that are generated using predictions obtained from a group of forecasters. The forecasters are first divided into a number of pre-defined clusters, which typically will have been formed using statistical clustering techniques. In particular, clusters of forecasters can be formed based on similarities of the forecasters' predictions. Then, statistical data are calculated for each pre-defined cluster (e.g., measures of central tendency and dispersion). Finally, the statistical data for all the pre-defined clusters are combined so as to obtain a combination forecast.

Claim 1 recites a computer implemented method for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model, wherein the method comprises the steps of "receiving from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller...*computing sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model* and the computer, wherein the classification and regression tree based model generates at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included within the at least one cluster, *each*

non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster...computing SSE values for the at least one defined portfolio segment using a simple model and the computer, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment...computing an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment using the computer...ranking the at least one defined portfolio segment based on the computed error ratio...and using the ranking by a potential buyer to determine an amount to offer for purchasing assets included within the at least one defined portfolio segment.” (Emphasis added.)

Neither Kiron nor Phillips describes or suggests each of the elements recited in Claim 1. Specifically, neither Kiron nor Phillips describes or suggests generating at least one cluster of assets included within a portfolio of assets, wherein *each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster*. Rather, Kiron merely describes a mutual fund securitization process wherein a computer program searches and identifies funds having a statistical performance greater than an aggregate subgroup over a period of time, and stores the identified funds in a new database. Phillips describes generating combination forecasts by dividing the forecasts into a number of pre-defined clusters, but does not describe or suggest that *each non-underwritten asset included within at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster*. Because neither Kiron nor Phillips teaches or suggests one or more of the claimed elements, it follows that a combination of Kiron and Phillips cannot teach or suggest those elements. (Emphasis added.)

Additionally, neither Kiron nor Phillips describes or suggests *computing sum of squared error (SSE) values for at least one defined portfolio segment using a classification and*

regression tree based model, or computing SSE values for the at least one defined portfolio segment using a simple model. Moreover, neither Kiron nor Phillips describes or suggests *computing an error ratio between SSE values based on a classification and regression tree based model and SSE values based on a simple model.* Even further, neither Kiron nor Phillips describes or suggests *ranking at least one defined portfolio segment based on a computed error ratio, or using a ranking by a potential buyer to determine an amount to offer for purchasing assets included within the at least one defined portfolio segment.* (Emphasis added.) Because neither Kiron nor Phillips teaches or suggests one or more of the claimed elements, it follows that a combination of Kiron and Phillips cannot teach or suggest those elements. For at least the reasons set forth above, Applicants respectfully submit that Claim 1 is patentable over Kiron in view of Phillips.

Accordingly, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claim 1 be withdrawn.

Claims 2, 6, 7, and 9 depend from independent Claim 1 which is submitted to be in condition for allowance. When the recitations of Claims 2, 6, 7, and 9 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2, 6, 7, and 9 are also patentable over Kiron in view of Phillips.

Claim 11 recites a system for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model, wherein the system comprises “a computer configured as a server and a database of asset portfolios, and at least one client system connected to said server through a network, said server configured to...receive from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller...compute sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model, wherein the classification and regression tree based model generates at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included with the at least one cluster, each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one

cluster...compute SSE values for the at least one defined portfolio segment using a simple model, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment...compute an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment...rank the at least one defined portfolio segment based on the computed error ratio...and determine an amount to offer by a potential buyer for purchasing assets included within the at least one defined portfolio segment based on the ranking.”

Claim 11, as herein amended, recites a system comprising, among other things, a computer configured as a server and configured to perform steps essentially similar to those recited in Claim 1. Thus, it is submitted that Claim 11 is patentable over the combination of Kiron in view of Phillips for reasons that correspond to those given with respect to Claim 1.

Claims 13-15, 18, and 20 have been canceled. Claims 12, 16, 17, and 19 depend from independent Claim 11. When the recitations of Claims 12, 16, 17, and 19 are considered in combination with the recitations of Claim 11, Applicants submit that dependent Claims 12, 16, 17, and 19 are also patentable over Kiron in view of Phillips.

Claim 21 recites a computer configured for grouping assets included within a portfolio of assets for valuation purposes using a classification and regression tree based model, wherein the computer includes a database of portfolios of assets, and wherein the computer is programmed to “receive from a seller a proposal to sell a portfolio of assets, the assets included within at least one segment defined by the seller...compute sum of squared error (SSE) values for the at least one defined portfolio segment using the classification and regression tree based model, wherein the classification and regression tree based model at least one cluster of assets included within the portfolio of assets for valuing each non-underwritten asset included within the at least one cluster, each non-underwritten asset included within the at least one cluster is assigned a value based on an average value assigned to underwritten assets included within the at least one cluster...compute SSE values for the at least one defined portfolio segment using a simple

model, wherein the simple model assigns a single value to all non-underwritten assets within the at least one defined portfolio segment based on a value assigned to at least one underwritten asset included within the at least one defined portfolio segment...compute an error ratio between the SSE values based on the classification and regression tree based model and the SSE values based on the simple model for the at least one defined portfolio segment...the at least one defined portfolio segment based on the computed error ratio...and determine an amount to offer by a potential buyer for purchasing assets included within the at least one defined portfolio segment based on the ranking.”

Claim 21, as herein amended, recites a computer programmed to perform steps essentially similar to those recited in Claim 1. Thus, it is submitted that Claim 21 is patentable over the combination of Kiron in view of Phillips for reasons that correspond to those given with respect to Claim 1.

Claims 23-25, 28, and 30 have been canceled. Claims 22, 26, 27, and 29 depend from independent Claim 21. When the recitations of Claims 22, 26, 27, and 29 are considered in combination with the recitations of Claim 21, Applicants submit that dependent Claims 22, 26, 27, and 29 are also patentable over Kiron in view of Phillips.

In addition, Applicant also respectfully submits that the Section 103 rejection of Claims 1-30 is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Kiron using the teachings of Phillips. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combinations. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Neither Kiron nor Phillips, considered alone or in combination, describe or suggest the combination(s) in Claims 1-30. Rather, the Section 103 rejection of Claims 1-30 appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is neither teaching nor suggestion for the combination of Kiron and Phillips, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason also, Applicant requests that the Section 103 rejection of Claims 1-30 be withdrawn.

For at least the reasons set for above, Applicants respectfully request that the Section 103 rejection of Claims 1-30 be withdrawn.

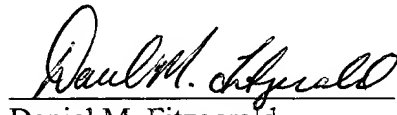
Newly added Claims 31-33, 40, and 41 depend, directly or indirectly, from independent Claim 1, which is submitted in condition for allowance and is patentable over the cited art. For at least the reasons set forth above, Applicants respectfully submit that Claims 31-33, 40, and 41 are also patentable over the cited art.

Newly added Claims 34-36, 42, and 43 depend, directly or indirectly, from independent Claim 11, which is submitted in condition for allowance and is patentable over the cited art. For at least the reasons set forth above, Applicants respectfully submit that Claims 34-36, 42, and 43 are also patentable over the cited art.

Newly added Claims 37-39, 44, and 45 depend, directly or indirectly, from independent Claim 21, which is submitted in condition for allowance and is patentable over the cited art. For at least the reasons set forth above, Applicants respectfully submit that Claims 37-39, 44, and 45 are also patentable over the cited art.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Daniel M. Fitzgerald", is written over a horizontal line.

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